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- [54] METHOD AND APPARATUS FOR COMPENSATING CROSSTALK IN LIQUID CRYSTAL DISPLAYS

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Related U.S. Application Data

[63] Continuation of Ser. No. 342,783, Nov. 21, 1994, abandoned, which is a continuation of Ser. No. 43,001, Apr. 5, 1993, abandoned.

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[52] U.S. Cl. 345/58; 345/101; 345/100

[58] Field of Search 345/58, 87, 89, 345/98, 94, 99, 100, 101, 90; 349/54, 75, 192

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[57] ABSTRACT

A method and apparatus for compensating crosstalk in liquid crystal displays is disclosed which involves applying boost voltages to the rows and columns of the display in proportion to the number of ON pixels in a row or column, the number of transition between "ON-and-OFF" or "OFF-and-ON" in each column, and the position of the pixel in a row. "Boost" voltages are applied to each row as it is being actively scanned to provide horizontal crosstalk compensation, while "boost" voltages are applied to each column during the vertical retrace interval of the display sequence to provide vertical crosstalk compensation. In a preferred embodiment, the vertical crosstalk compensation is determined during the vertical retrace interval over several frames.

60 Claims, 19 Drawing Sheets

